axcess.io

CAPITAL FLOAT

CASE STUDY

Enablement of a push button deployment

ABOUT AXCESS.IO

AXCESS.IO is a niche provider of Managed Cloud Services to businesses worldwide and has served an ever-growing number of clients since its inception. In a relatively short period, AXCESS.IO has quickly become a niche consulting firm specializing in Cloud Advisory, Cloud Managed Services, and DevOps Automation.

ABOUT CAPITAL FLOAT

Capital Float is a well-recognized online platform that provides working capital tobusiness of all sizes—from small and medium-sized enterprises to Fortune 500 companies. The company offers flexible, short-term loanstopurchase inventory,service new orders or optimize cash cycles.Formerly known as Zen Lefin PrivateLimited, Capital Float is a non-banking organization legally registered with the RBI. Headquartered in Bangalore, India, Capital Float is staffed with industry professionals with prior experience at companies like Gokaldas Exports, Wipro, McKinsey, Citibank, and Oracle. The company continues to grow, with locations in South, East, West, and North India.

THE CHALLENGE

AWS provides the opportunity to quickly launch and scale applications. However, Capital Float manages the release for 50+ applications and 100+ micro-services running 24/7. To avoid downtime and ensure quality releases, the company needed to execute, run, and automate the entire development as well as the deployment process. That meant they required a release pipeline incorporated with seamless auto-scaling.

Developing a solution of this complexity that could handle the required volume presented several challenges:

- Enablement of a push button deployment through either right branching or single window
- Automation of the pipeline with minimum disruption
- Maintaining seamless load balancing along with traffic flow
- Running auto-scaling and deployment in tandem

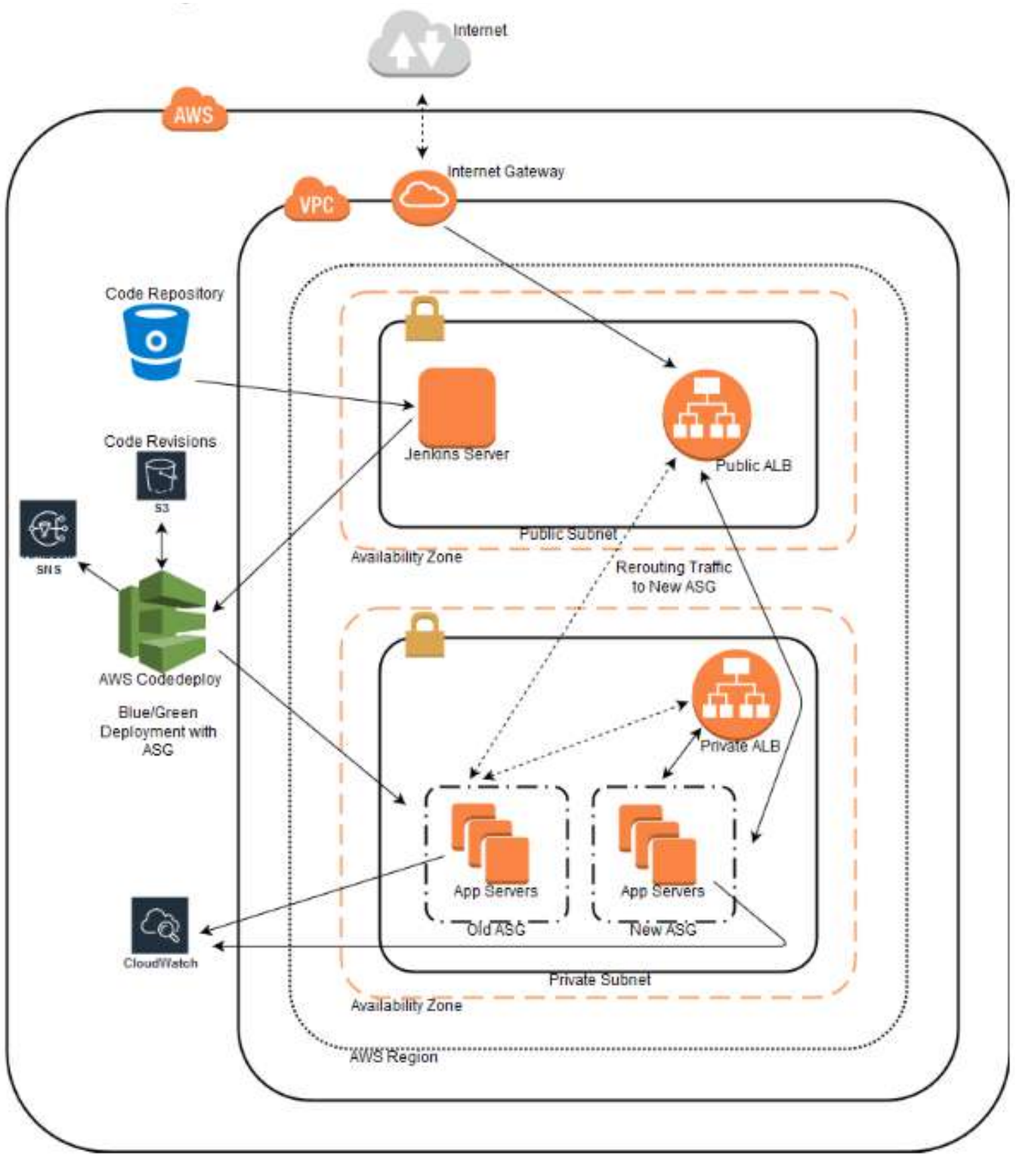
OUR SOLUTION

Axcess first evaluated the applications and the business Service Level Agreements. To provide the support and security required for Capital Float's varied customers and large traffic volume, we proposed to run a blue-green deployment suiting the auto-scaled environment with appropriate hooks.

Because the solution would operate in a production environment, we worked on a Virtual Private Cloud with multi-availability zones, public and private subnets safeguarded with custom routing, network Access Control Lists (ACLs), and other security groups.

The Axcess solution included:

- Configuration of the deployment server for better deployment and to ensure enabling ports from code repository and other private yet relevant subnets.
- Systemization of AWS code deploys into the deployment pipeline.
- Using CodeDeploy to ensure the right deployment of the auto-scaling group would be available in the application.
- Using AWS continuous development (CD) to configure the deployment group along with blue-green deployment measures.
- Developing SNS notifications to read the deployment status at different stages.



The role of AWS services in the overall solution:

- Made the code deployment easier and helped manage thetraffic replacement
- Allowed custom scripting
- Ensured deployment configurations
- Maintained the right version of code
- Supported status notification distribution
- AWS CloudWatch was used to view and access the alarms and metrics

THE FINAL OUTCOME

The Continuous Integration and Continuous Delivery (CI/CD) pipeline has not only improved the speed of releases but has also greatly improved release quality. Today, over 100+ releases are deployed in 20 applications every quarter. Blue-green deployment has virtually eliminated any downtime during the releases.